

Appl. No. 09/872,052

Attorney Docket No. 1810A-045 (81841.0192)

Amdt. Dated December 14, 2004

Customer No.: 26021

Reply to Office Action of September 14, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-54. (Canceled)

55. (Previously presented): A device comprising a plurality of unmodified biopolymer and a solid support, wherein the solid support has at least one surface comprising pendant acyl fluoride functionalities, and wherein an unmodified end of the biopolymer is attached to the solid support by reaction with the pendant acyl fluoride functionalities, in the absence of a spacer arm.

56. (Previously presented): The device of claim 55, wherein the biopolymer is selected from a group consisting of nucleic acids, polypeptides, proteins, carbohydrates, lipids and analogues thereof.

57. (Original): The device of claim 55, wherein the biopolymers are selected from a group consisting of polynucleotides, protein A, antibodies or streptavidin.

58. (Original): The device of claim 55, wherein the biopolymer is a polynucleotide.

59. (Original): The device of claim 58, wherein the polynucleotide is selected from a group consisting of synthesized oligonucleotide, amplified DNA, cDNA, single stranded DNA, double stranded DNA, PNA, RNA or mRNA.

60. (Original): The device of claim 55, wherein the biopolymers may be the same or different.

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61. (Original): The device of claim 55, wherein the solid support is selected from a group consisting of polymeric materials, glasses, ceramics, natural fibers, silicones, metals and composites thereof.

62. (Currently amended): The device of claim 55, wherein the solid support is a polymeric material selected from a group consisting of ethylene ~~acrylic~~ acrylic acid, ethylene methacrylic acid, carboxylated PVDF, carboxylated polypropylene or carboxylated polyethylene, and copolymers thereof.

63. (Previously presented): The device of claim 55, wherein the solid support is in a form selected from the group consisting of threads, sheets, films, gels, membranes, beads, and plates.

64. (Original): The device of claim 55, wherein the solid support is fabricated from plastic in the form of a planar device having discrete isolated areas in the form of wells, troughs, pedestals, hydrophobic or hydrophilic patches, diecut adhesive reservoirs or other physical barriers to fluid flow.

65. (Original): The device of claim 64, wherein the solid support is a microplate.

66. (Original): The device of claim 64, wherein the plastic is a surface treated with acyl fluoride functionalities.

67. (Original): The device of claim 66, wherein the plastic is selected from a group consisting of polypropylene, polystyrene, polysulfone, polyethylene and copolymers thereof.

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68. (Original): The device of claim 64, wherein the biopolymers are attached to different discrete, isolated areas to form an array, and wherein the biopolymers may be the same or different.

69. (Original): The device of claim 55, wherein the device is prepared by a method comprises the steps of:

- (a) providing a plurality of unmodified biopolymers;
- (b) providing a solid support having at least one surface comprising pendant acyl fluoride functionalities; and
- (b) contacting the plurality of unmodified biopolymers with the solid support under a condition sufficient for allowing the attachment of each biopolymer to the solid support at a discrete location on the solid support.

70. (Original): The device of claim 69, wherein the solid support has a plurality of discrete, isolated locations, and the biopolymers are attached to the solid support at the respective discrete, isolated locations.

71. (Previously presented): The device of claim 69, wherein the biopolymers are the same or different.

72. (Canceled)